



Figure 1

STC-1

GTC-1

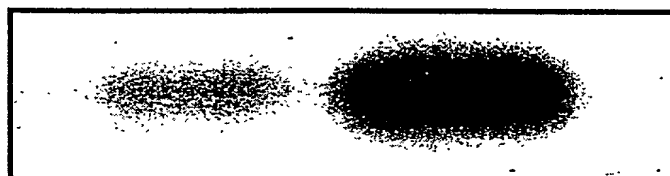


Figure 2

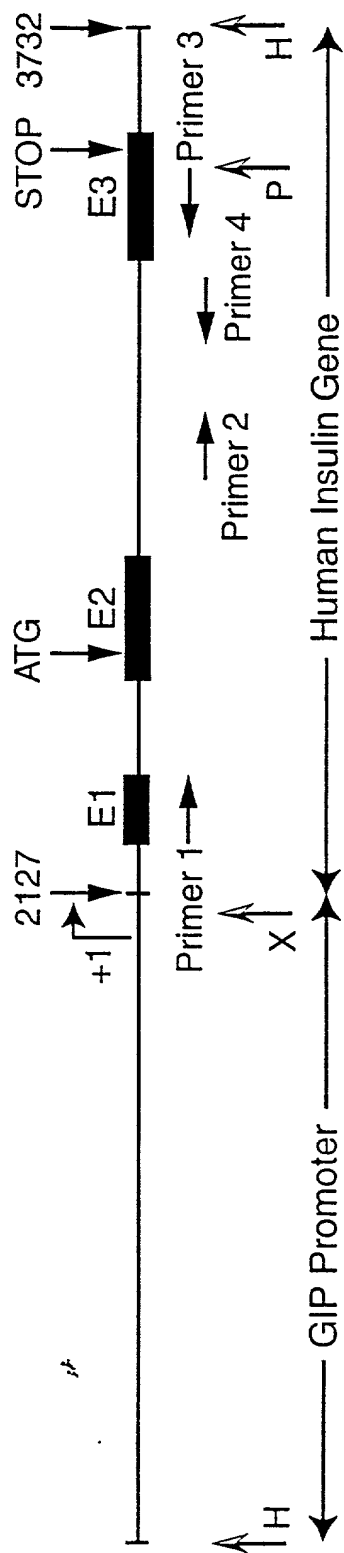


Figure 3

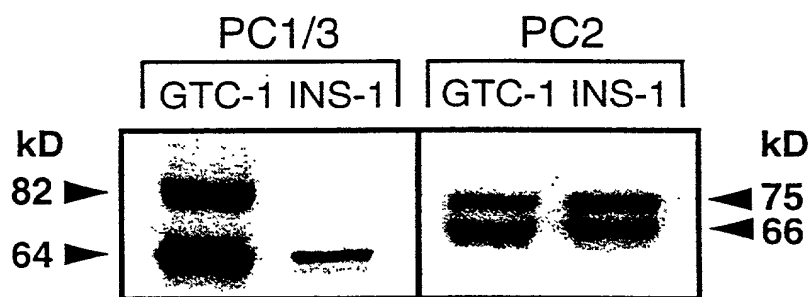
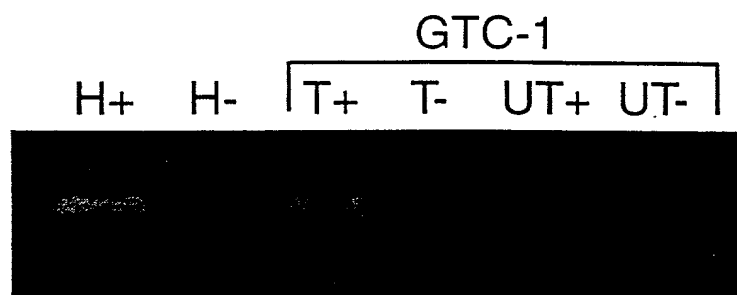


Figure 4

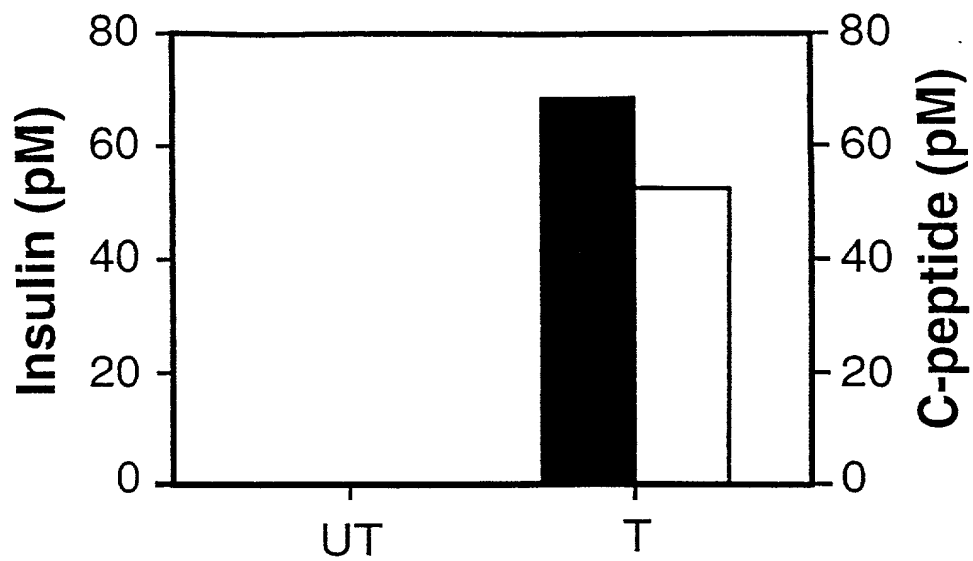


Figure 5

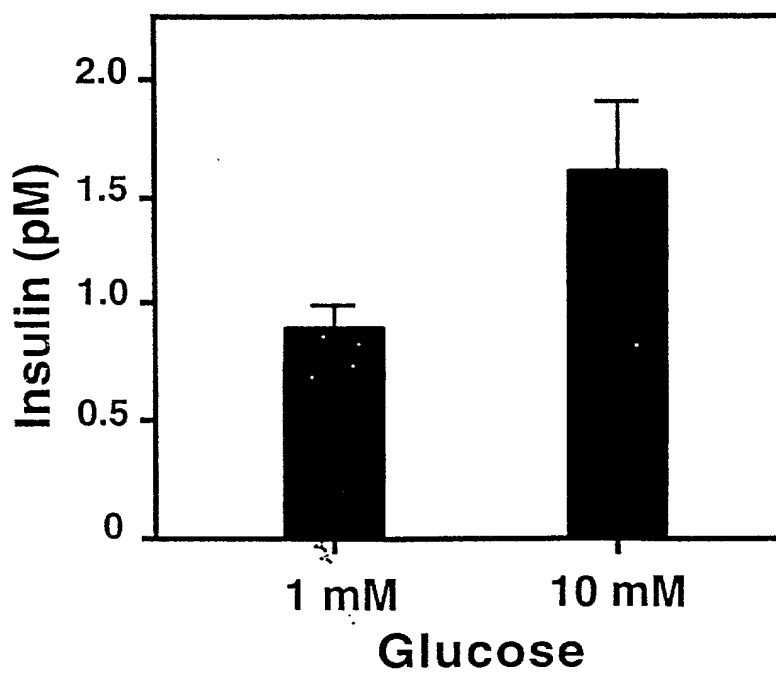


Figure 6

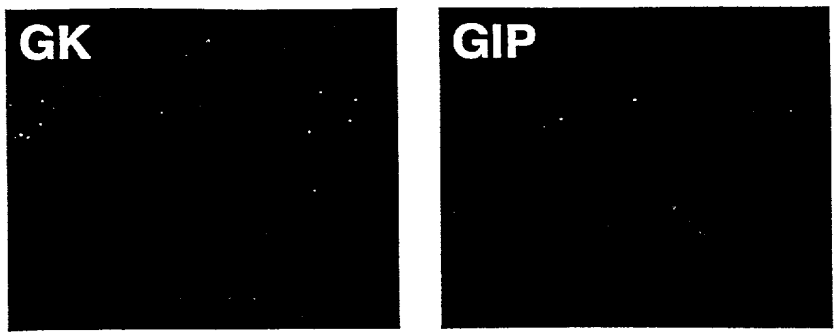


Figure 7

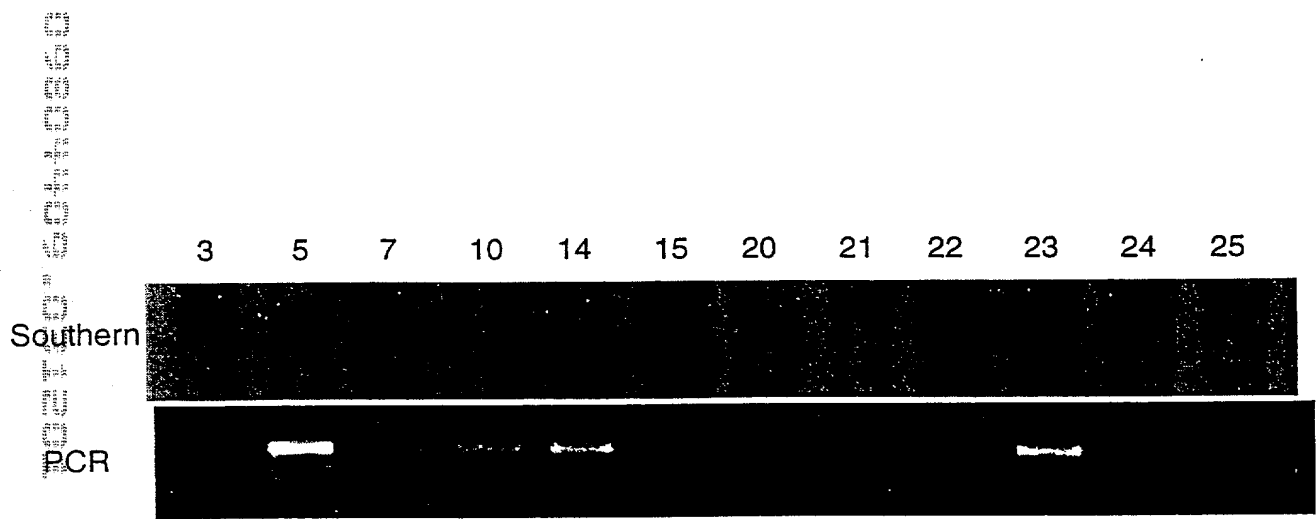


Figure 8

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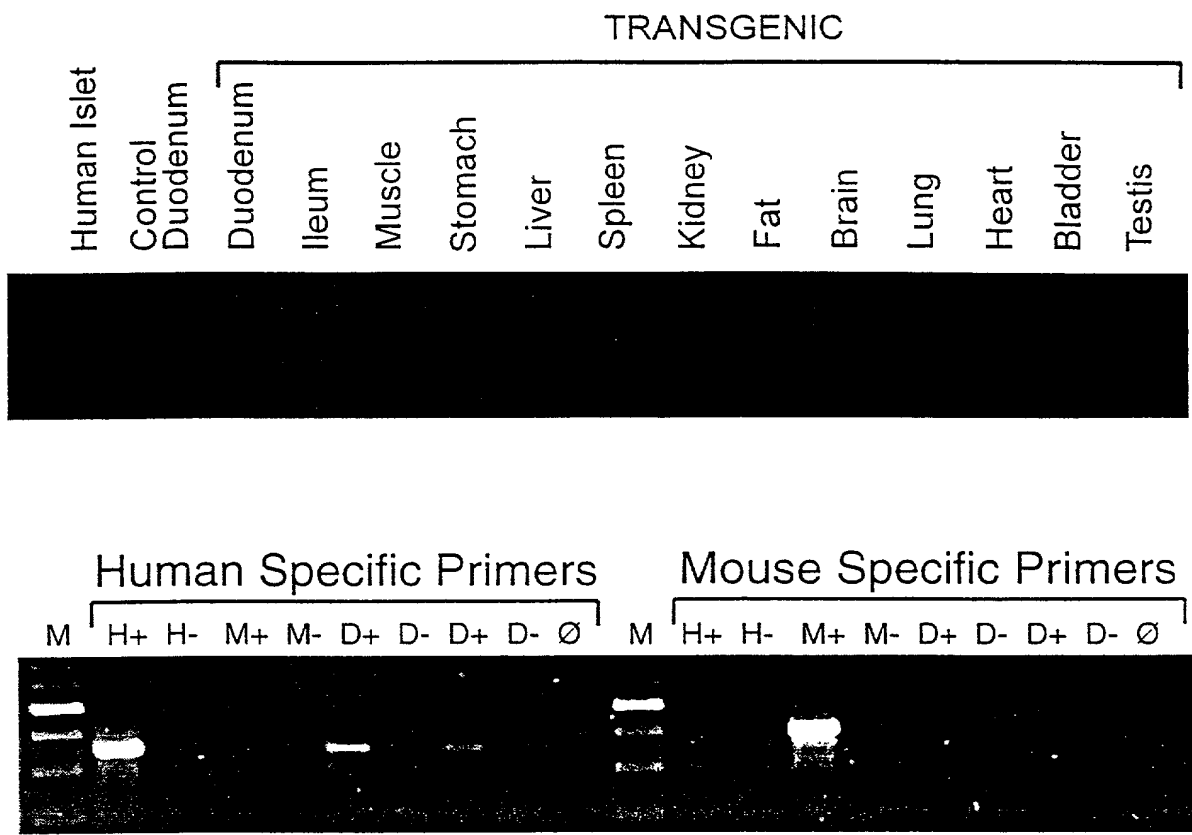


Figure 9

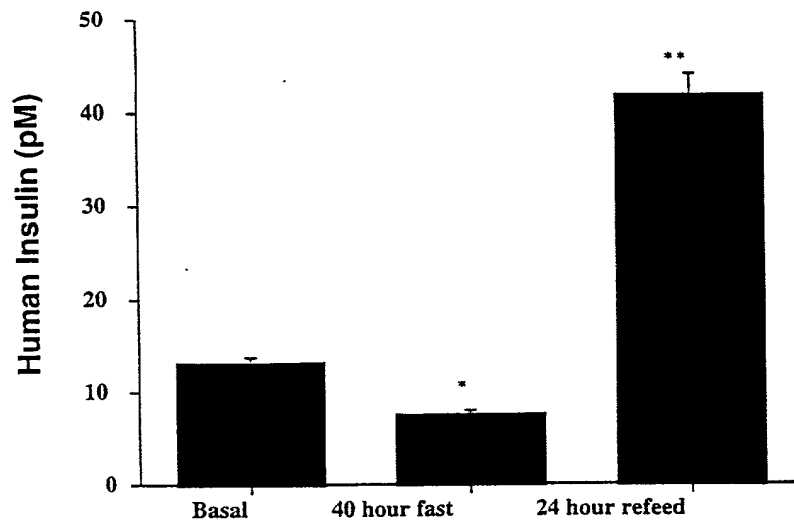


Figure 11A

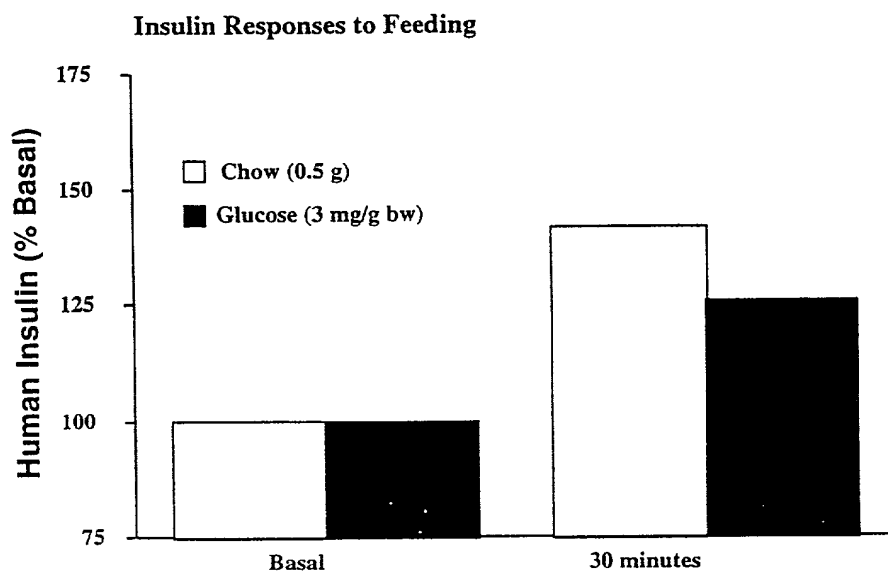


Figure 11B

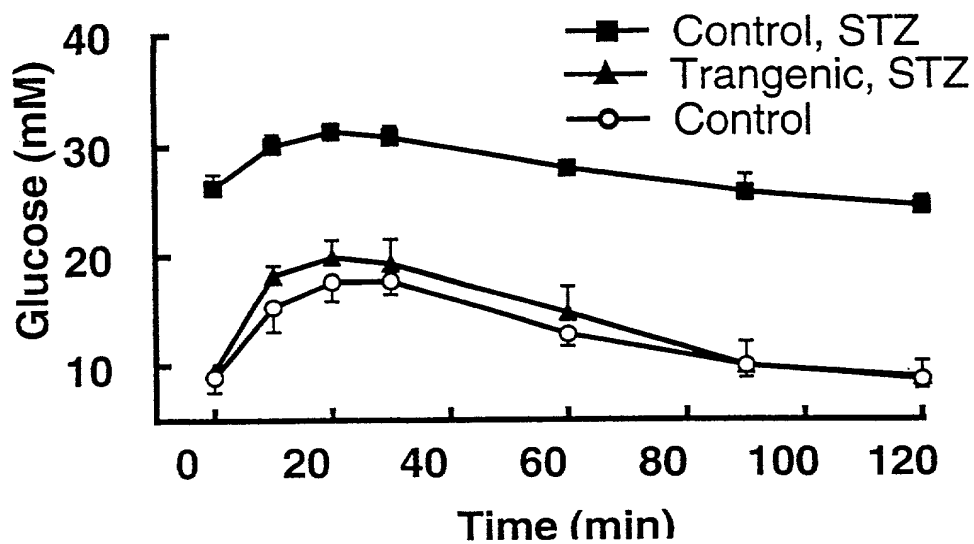


Figure 12

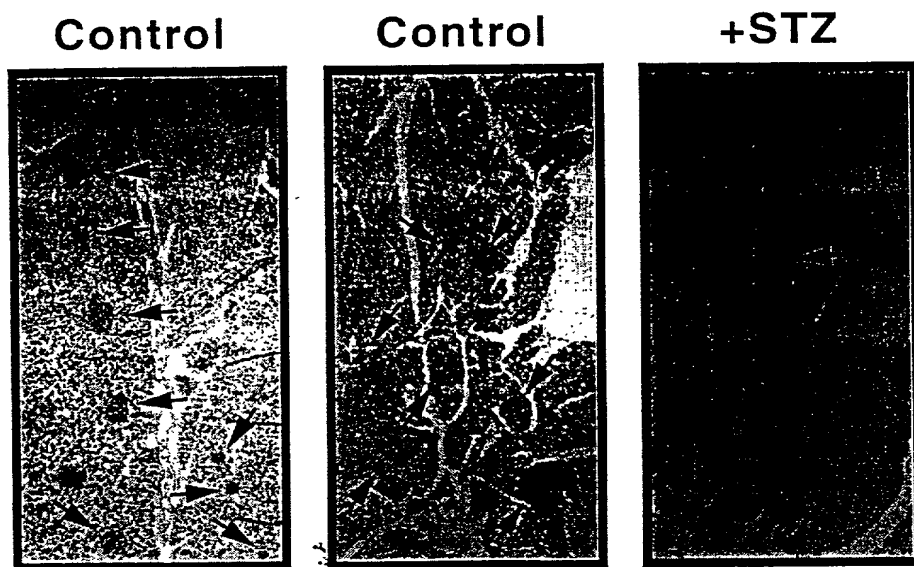


Figure 13

GIP Promoter

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 ggctggagag ttggttcagt gtttaagagc acttattgtg gggttgggga ttagctcag
 tggtagagcg ttgcctagg aagctcaagg ccttgggttc ggtcccagc tccggaaca
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 taaagatata tatatataat atatatacat ataataata tatgatata atatataat atatctttgt
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 catccacatc tgggattcag atcccagatc cttctgttc ctcagaagt cacctacagc
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 attaggtgta taatgggggt cactgggcag gaccagtggg cttgagcttc aaagataaga
 ggtttcagg ttaatcaga cctgtggtg tgtggatata aggaagctaa cacagggtct
 tgaagcaaga tcttgag

Mouse chromogranin A (Chga) gene, promoter region.
 ACCESSION L31361

1 ccgaaattac ccactacgtt ggaattctat aagggttggg ttgctgttt tgtttacagc
 61 tgcgtctttg gcaccagca cagctgagt gttctaagcc cagctgatg cttaacacat
 121 ggttgtgaa tgaatacacg cgaagccggt tctcatttag gggcatgagt aggcagaggt
 181 gtgggcagga agcaggaaag agcggaaaca ggtcgggaca gaaaggagg gctctgaagg
 241 atgccagtca gtgcaaaact gtcacccaga taccaggttc actgtggccc taggccaggc
 301 tgcacggggc ttccatgtg gctgtcccag ggtgagagca gaactgcggt gggcggggca
 361 gaaggaaacc aaccaggaag cagggttgca ccaaattat ccaggtttta agtacatta
 421 agagacaagg ctgggctgtt gaaggtcaga ggtgtccctg ggtgtctgga ctaggactga
 481 ccacttctgt tttagtttaa tggtgagaac tgcctcacac tgcacttgc cttacttgc
 541 ccttgagagc tgtgagccta ggaccaccc atgtgtgggt tggacctta gtcacacact
 601 gaacgtgtgt gaagccactg gttgtcagag cagggtcttc ggcactgagg aagcagtgc
 661 cactatcccc tatcaataa caattaaata cacacagaat gogaggcaca caactgagt
 721 tcaggagagg cctcgtcag gcaagggtt caagaggctt ctgtgggacc cgttgatgt
 781 tccaggaggt tcttaagat gggcgtgcct ccagccaagt gaaatcaaga gaaaagtacg
 841 cgaagtatag gaaaactcag cagtctggag aggtaaatag gggaggaatc cagggtcag
 901 agacaggagt gacttgccca cggacgcaca gcaagtggc aggtggagt cagctgtgcc
 961 accttctgaa gccgggtacc ctttacagc accagataca agcgggatag agacagctga
 1021 tggagaagct ggaggtggg ggcgggacc cgaaggtggg gaaagggcgc gggggggcgg
 1081 tctatgacg taatttctg ggtgtgtgcg cgcgtgtgcg tgcgtgtgcg tgtatataa
 1141 agccggcata gcattgtgc tctgtccgc gccaccgca ccatcaccgc tgttaccac
 1201 accgtactg cagtgttccc gctgtgcag agcttggta gccagactac agaccactc
 1261 ccgccatcct cctgcagcag ctcgtccact cttccgcac cgtccggctc gctatgcg

//

Figure 14

Mus musculus secretogranin II (Scg2) gene, promoter and exon 1, complete sequence.
 ACCESSION AF037451

```

1 gggaacttct tctagctctt tcattagggg cctgtgttc catctaatag ctgactgtga
61 gcattccact ctgtgcttgc caggcactgg catagcctca caagagacag ctatatcagg
121 gtctgtcag caaatcttt ctggcatatg caatagtgtc tgggtttggt ggtgttatat
181 gggctggatc cccgggtggg gcagtccttg gatggcttt cctccctct tagctccaaa
241 cttgtctct gtaactcctt ccattgggtac ttgtttccc attctaagaa ggagcaaaagt
301 atccacactt ccttctctt ccttctctt gagttttgca aatgccacaa aacttcaaa
361 gccttctgaa tagccttctc tttagtctt tccaatgat attaaaataa tctatcttc
421 atccccattg attaaagcct tctaaagcc agaaaactat attcatttt ttctttccc
481 agtagttcac aaactatctg gcacctcata agcatcataa ctcagtgggt gggtagataa
541 aattggaatg tgattgttca gtcagcagag acttttagag gacctatac aacaagatc
601 tctcagtct cagaaatata tttagtata tacagggtta gaggactcac atcttaata
661 aaataaagt aaaatttag acctgtataa attattaagg tacctaatac agttccacgg
721 caaagtacag ccattgttat gaattataa tccaagaagc ggtgggttaa ctctgacatt
781 gttccttga tgggtctcat tcattgaagt tagtcacctc aacttactca accaaaacct
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1021 gcaacacctg attttgtga agattgaat ggcctcatat agaagtatca acaacttgag
1081 cgtctgtgaa ctctcattt gacactgtgc tgaaagaatt ggagtgtatt ctcatataa
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1201 ggagtcata tatgaaatac gatctatcat atttgcaatg ttctgttcaa ttgtggctgc
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1441 gtgctgaaca tttatttgc agcctcagag ataaaagaag ggggaagaag ctgtagttt
1501 tgctacataa gacaggtggc gtaagcatgc aacgctttaa aaaaatatct aaagtgttg
1561 tttctctcg gattcttga aaaagctgc ctgcgtggg gtttgaggct gagccggta
1621 cgtcagcgtg gaatgcggag tcaggcgccc aggcctctta taagccgagg agctgtccgg
1681 tgctgaaacg gcccagccc tctcagcg gcagagagga gcagtcttg agcctccac
1741 ataataaag acagaggtaa

```

//

Mus musculus glucokinase gene, 5' flanking region.
 ACCESSION U93275

```

1 agcttaggt gtgtgaatat ctactttgt gctagggcct tggtcatact aagtaagttt
61 ccccttact ggggtgtacc agtttaccct ggactgtcta agcaacaaga aggatagaca
121 tggcctacca cagatttcat gtctgccact ggctatgtca gaacatgtag gagcttttg
181 aatcagtga acaggtattt tcagactgcc ttccctcgt ggggcttcc cgaagccata
241 ttttctag agtcagcctt tcccagtg ggacaagctg tactggacag atgccagcca
301 ctgaactgg gaatacatgg tcatttaggc agctggctta tctatccat ggtacttgat
361 ggcttcgggt cagcacctca cagaaagttc agacgggagg ctccgagaa aacagagaag
421 caggcaggag atcctgcagg caatcctct gctccacagc ctgcattggc ttccctcagc
481 ctagtgctg gtgggtccca tctgagaaca ttggttatat gttatttca aaccgatctg
541 ccttaagga gtggaagaaa aaaactgtg tgtttgggt accttatga taatggcctt
601 ttcctccc taataaatat tgccaagtag gtagattct atacgaaagc tcttaacca
661 tggtagtagc aaatcatga ggtgctaata atgaatactg gatgcagtca gtacaggat

```

Figure 15

721 ataaatgga atgtaagagc ctgttgctat gaatggtag ctaactagat gttgtacaag
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 841 ggattttttg atgccatgat aaaaatgtga agaatactgt tcctaccaaa aaagaagaag
 901 aagaaggaga aggaggagga agaggaggag gaggaagaag agggggagga agaagaagag
 961 aaggaggagg aagaggagga ggaggagaa gaggaggagg aggaagaaga agagaaggag
 1021 gaggactagg aggaggagga gaagaaggag aaggggagg agagagtagc cagaacattt
 1081 ggggtgccat cagaatacca gatactccag acatagtcac agaaggactg gttgtttgt
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 1201 tgataggcaa gattcatcca caagaatgag acaagatggc tgcctgaaca agccctgaac
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 1321 aaacaaagac tacagacagc agaggaaactg gagagcagga gaaattgggt ctcccttta
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 1561 ggaggggtga gaaggggaaa gtgatgtaat tatcttttaa ttataaaaa aataaaaaat
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 1801 aaaaaaata aaaaataaaa tattagaata aaatgtagag gaatatttt aatttaacaa
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 1921 gaatccagca cgtggataga tacttctgta tgatgcaaga cactatttat caggttgtaa
 1981 cttagcaga acttgagttg taactgttg gaaacacaa caccctggc aaacaaaaga
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 2101 ttcaatagta atataattat tgaacaaata atccttaaaa gaagaaatcc agaggaatag
 2161 caagttaggg gaagagaggg tgtgtgtgtg tgtgtgtgc cgcacattta tagccaaat
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 2341 agttcaatc ccagcaacca catgattgct cacaaccatc tgtaatggga tctgatgcct
 2401 tctctggtg tgtctgaaga aagtaccgt gtactataa ttataataa ataatcttt
 2461 aacaaaaaaa ccccataat ttcaacaaca gatatgtcct ggtctgaggc ttccaggcat
 2521 agaataagaa acacacagag tgtggagcca gtgcggttca ggtccgcat tccagttcag
 2581 gttcagacc aagagaagg gaaaagaaga gacaagcaac aag

H.sapiens adenosine deaminase (ADA) gene 5' flanking region and exon 1 (and joined CDS).
 ACCESSION X02189

1 tccaggaaat gcgcatcca ggccggcggg cggggcgggg gctccggcga gagggcgggc
 61 cccgggaacg gcggcgggcg gggcgggagg cggggcccg cccgttaaga agagcgtggc
 121 cggccgcggc caccgctggc cccagggaaa gccgagcggc caccgagccg gcagagaccc
 181 accgagcggc ggaggaggga gcgacgccc ggccgacgag ggcacc

Homo sapiens mRNA for pre-proinsulin.
 ACCESSION X70508

MALWMRLPLALLALWGPDPAAAFVNQHLGSHLVEALYLVCGERGFFYTPKTRREA
 EDLQVGQVELGGGPGAGSLQPLALEGSLQKRGIVEQCCTSICSLYQLENYCN"

1 gctgcatcag aagaggccat caagcacatc actgtccttc tgccatggcc ctgtggatgc

Figure 16

61 gcctctgcc cctgtggcg ctgctggccc tctggggacc tgaccagcc gcagccttg
 121 tgaaccaaca cctgtggcg tcacacctgg tggagctct ctacctagtg tgcggggaac
 181 gaggtctctt ctacacaccc aagaccgccc gggaggcaga ggacctgcag gtggggcagg
 241 tggagctggg cggggggcct ggtgcaggca gcctgcagcc ctggccctg gaggggtccc
 301 tgcagaagcg tggcattgtg gaacaatgt gtaccagcat ctgctccctc taccagctgg
 361 agaactactg caactagacg cagcccgag gcagccccc acccgccgcc tcctgcaccg
 421 agagagatgg aataaagccc tgaaccagc

Homo sapiens leptin (LEP), mRNA.
 ACCESSION XM_004625

"MHWGTLGFLWLWPYLFYVQAVPIQKVQDDTKLIKTTIVTRINDISHTQSVSSKOKVTG
 LDFIPGLHPILTLKMDQTLAVYQQLTSMPSRNVQISNDLENLRDLLHVLAFSKSCHLP
 WASGLETLDLGGVLEASGYSTEVVALSRLQGSLLQDMLWQLDLSPGC"

1 tctgttttca ggcccaagaa gcccatcctg ggaaggaaaa tgcattgggg aaccctgtgc
 61 ggattcttgt ggctttggcc ctatctttc tatgtccaag ctgtgccc atcaaaaagtc
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 181 acgcagtcag tctctccaa acagaaagtc accggtttgg acttcattcc tgggctccac
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 1861 gttctgtct gattggctca ccaagcaag gccaaaatta ccaaaatct tggggggtt
 1921 ttactcagt ggtgaagaaa actccttag caggtgttc tgagacctga caagcactg
 1981 taggcagtg ccaggactcc ccaggccagg ccaccaggat ggccctccc actggaggtc
 2041 acattcagga agatgaaga ggaggtttg ggtctgcac catcctgctg ctgtgtttt

Figure 17

2101 gctatcacac agtgggtggt ggtatctgtcc aaggaaactt gaatcaaagc agttaacttt
 2161 aagactgagc acctgcttca tgctcagccc tgactggtgc tataggctgg agaagctcac
 2221 ccaataaaca ttaagattga ggcttgcctt cagggtatctt gcattcccag tggtaaacc
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 3301 atcgcgccac tgactccgg cctgatgaca gagegagatt ccgtctttaa aaaaaaaaaa
 3361 aaaaagtttg ttttaaaaa aatctaata aaataacttt gccccctg

Homo sapiens cholecystokinin (CCK), mRNA.
 ACCESSION XM_003225

"GSAAGLLRLETPSQLRPNPKAMNSGVCLCVLMAVLAAGALTQPVPPADPAGSGLQRAE
 EAPRRQLRVSQRTDGESRAHLGALLARYIQQARKAPSGRMSIVKNLQNLDPISHRISDRD
 YMGWMDFGRRSAEEYEYPS"

1 ggctcagctg ccgggctgct ccggttgaa acgccaagcc agctgcgtcc taatccaaa
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 121 acgcagccgg tgctctccgc agatcccgcg ggctccgggc tgcagcgggc agaggaggcg
 181 ccccgtaggc agctgagggt atgcagaga acggatggcg agtcccgagc gcacctgggc
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 421 ccgccatcag cccaacggga agcaacctcc caaccagag gaggcagaat aagaaaaca
 481 tcacactcat aatcattgt ctgtggagt tgacattgta tttatctatt tattaagttc
 541 tcaatgtgaa aaatgtgtct gtaagattgt ccagtgaac cacacacctc accagaattg
 601 tgcaaatgga agacaaaatg tttttcat ctgtgactcc tggctgaaa atgtgttat
 661 gctattaaag tgattcatt ctgcc

CCK Promoter (Rat)
 ACCESSION S70690

1 aattcgcgcg ctaagccgca ttattcacgt ttccagacat gtcacaaata cagctaattc

Figure 18

61 ctacaacctg agctgtgtca tggggggggg gggaatcacc cacagcattt aatctgtctc
 121 tgttttaaac acgttgcttc taagtaaaga gaccgctaga gccacaacca ggaacctaac
 181 tgctgtggc atcactggc tttcatagt ctccctcagc cggaaccccc ccacgtggg
 241 tgccttctct atttagaaag agtttctaag ctttctctct tcacctaga ctggcaaggt
 301 tgagggtagg ctgagggttg caagactgtg agaaaaggga gccctctct tcttctgtc
 361 cggtagtat ctacccaag atctcacca ccagtgga tcccgtact ctaggagaaa
 421 ggaagaactc tagaggacgg gaagatcatt gcaagctccc ctatgtgtc gagcccagcc
 481 cgctccactc agccagccag agcttgaggg tgcttgagac actctctggc gccacttcgc
 541 gaccaaatac atcggtagat gtaggctggt gagaagtcac ctgggaaga aatggaacc
 601 tttcccaa aggcttccg caaaaaggc aagagctgca ccaggtatc taaaattctg
 661 taagacgaga atccagagg ccaactgtga ttgagttctg aaaaattgag agccctactc
 721 cctctctca ctgtgggag ccactcagg tctgaagtc tccagagaa catgccagaa
 781 ttacattgc tgacacctag tctgtaggg tccccgggt tctggaagg attgatccc
 841 taaagctca ctaaacagt gtcagcttct ccattccaga caactctct cttctctccg
 901 ggagtagggg tggcaccctc cctgaaggag actcagcaga ggcaccgaac agggtaggga
 961 ggaaagctgt ttagataaag aggaggactc atacaaagta cccgcctgg gaggggctat
 1021 cctcattcac tgggccgttt ccttctccc ggggggccac ttcgatcgtt ggtctctcca
 1081 gtggctgcct ctgagcacgt gtcctgccgg actgcgtcag cactgggtaa acagatgact
 1141 ggctgcgtac cggcgggggc tatttaagag gagtcgcct gccgcctgcc ctcaacttag
 1201 ctggacagca gccgttgaa accgcaagc cagctgactc cgcacccgaa ggtaagtggc
 1261 tggcagatcc aagaatcatg agtgaaga actggcctgt agcttgcac ctattgccgt
 1321 ttagctttc cattttctg gcctccctc actgacagc tg

Human messenger RNA for growth hormone (presomatotropin).
 ACCESSION V00519

"MATGSRTSLLLAFLGLCLPWLQEGSAFPTIPLSRPFDNAMLRAHRLHQLAFDITYQEFEE
 AYIPKEQKYSFLQNPQTSLCFSESIPSPNREETQQKSNLELLRISLLLIQSWLEPVQFLRSV
 FANSLVYGASDSNVYDLLKDLLEGIQTLMGRLDGSPTGQIFKQTYSKFDNNSHND
 DALLKNYGLLYCFRKMDKVETFLRIVQCRSVEGSCGF"

1 cgaaccactc aggtctctgt ggacagctca cctagctgca atggctacag gctccgggac
 61 gtccctgctc ctggcttttg gctgctctg cctgccctgg cttaagagg gcagtgcctt
 121 cccaaccatt ccttatcca ggcctttga caacgctatg ctccgcgcc atcgtctgca
 181 ccagctggcc ttgacacct accaggagt tgaagaagcc tatatccaa aggaacagaa
 241 gtattcattc ctgcagaacc ccagacctc cctctgttct tcagagtcta ttccgacacc
 301 ctccaacagg gaggaacac aacagaaac caacatagag ctgctccgca tctccctgct
 361 gctcatccag tcgtggctgg agccgtgca gttcctcagg agtgtcttcg ccaacagcct
 421 ggtgtacggc gcctctgaca gcaacgtcta tgacctcta aaggacctag aggaaggcat
 481 ccaaacgctg atggggaggc tgaagatgg cagccccgg actgggcaga tcttaagca
 541 gacctacagc aagttcgaca caactcaca caacgatgac gcactactca agaactacgg
 601 gctgctctac tgcttcagga aggacatgga caaggtcgag acattctgc gcacgtgca
 661 gtgccgctct tggaggggca gctgtggctt ctactgccc gggtggcatc cctgtgacc
 721 ctccccagt cctctctgg cctggaagt tgccactcca gtgccacca gcctgtctc
 781 aataaaatta agttgcatc

//

Figure 19

(-1894)

5' _GAGTGGCGACAGGCTGCTGCTAGCAGGCTCTACACTGAGCTAACCCACCCATAT
ATATACATAGTTACTATTAGCTTTATTTATATTTTTAAGATTATCATTATATATATAG
TACACTGTAGTGTCTAGATACACAGAAGAGGCATCGGTCTCTTACAGAGAGCCACC
ATGTGGTTGCTGGGGATTGAACTCATACCTCTGGCAGAGCAGTCGGTGCTCTTAACG
CTGAGCCATCTCTCCAGCGCCCCCAAAGCCCAGCTTTTAAAAATATTTTAAAATTTCT
TTCTACAGATTGTTTTATGTATATGAGTGTTTTGTGTGTATGCGTTGATGTGTGTACT
GTGTGCATGGCACATGCCAGTGGGCCACAGACAGAGGGGACATGAGATTCCCCTGAA
ACTTGGAGTTACAGATGGCTGTGGGCTGCCATGTGAGTGAGCGCCTTTGGAACCAAA
CCTGGGTCCTGCACAAAAGCAACAAGCACTCTTAATCGTTGAGCCACCTCTCCAACC
CCTTGATATTTCTTTTCGTTGGTGCATTAATAATTGATAAACAGAGGGTTTTCTTTATT
TAAAGATTTATTTATTTTATGTGAGTACACTGTTGCTCTCTTCAGACACATAGAAGAG
GGCATTGCTGGATTCTGCTACAGATGGTTGTGAGCCACCATGTGGTTGCTGGGAGTT
AAACTCAGGACCTCTGGAAGAGCAGTCAGTGCTCTTAACCACTGAGCCATCTCTCCA
GTCCCTTCCTCAACCTTCTGAGAACAGGCAAACCTCCACCATGATTGGCTTATAAATC
GTTATATGGACCTACTAAGGATGTAACAACCTGGGAGCATGCTTACCTAGCATGTCCG
AAACCCGGAGTTCAGTCCCTAGCACTGCACAATCTCAGTCCTTATGAAGTAGAGGGA
AGATCAGAGGTTCAAGGACAACATCAATTTGAGACCAGCCTGGGCTACTTACCAAA
GAAAGAAAGAGAGAAATAAATAAATAGATAGATAAATAAATAAATAAGTAAATAA
ATATCTTATGGCTGGAGAGTTGGTTCAGTGTTTAAGAGCACTTATTGTGGGGTTGGG
GATTTATCTCAGTGGTAGAGCGTTTGCCTAGGAAGCTCAAGGCCCTGGGTTCCGTCC
CCAGCTCCGGAAACAAAACAAAACAAAACAAAACAAAACAAAACAAAACAAAAC
CTGTCTGGAAAACACCTAAATAAAGATATATATATATAATATATATACATATAATAT
ATATATGATATATATATATATATATATCTTTGTGGAGGAAGCTATACCTTTCTTTCTT
GAGCCTCCAACACATAAATGTGCCCTGTCATCCCATTTCATATTGCCCAAGTGGGAA
ACCATGTGACTATAAACTCTAAGTTCCTAGTCACTAGGAACCTCTCAAGACACCTACC
TCAGGCAGCATCACTTCCGGAGTGCCACCATTATCAGTTAACATCCACATCTGGGAT
TCAGATCCCAGATCCCTTCTGTTCCCTCAGAAGTCACCTACAGCTTTGTGGGGGTGC
CCCTTCCCTCAGAGAGTGCCACCCGAGTTGACCCTCACCAAGGCAACCCTTTGTACC
CACAGAATCCAACAGGAAGTAGGGGGAAGAACAGCCGGCCCTGTGCCAGAAAAAA
AGAGGGGAGGGAGAAGGGGGTGCTCAGCCTACCACCGGGCAGGTCCCAGATAACA
CTGCAGATACCCAAATGTTAATCACCCATTAGCACAGGCCCAGAGCAAAGGGGAAA
GTGATTAGGTGTATAATGGGGTTCCTGGGCAGGAGCAGTGGGCTTGAGCTTCAA
GATAAGAGGTTTTTCAGGTTAATCAGCACCCCTGTGGTGTGTGGATATAAGGAAGCTAA
CACAGGGTCTTGAAGCAAGATC_3' (-1)